SYLLABUS of

B.Sc. (Hons) Home Science Choice Based Credit System UGC, 2015

For Submission to

Gauhati University for Approval

Programme template for B.Sc (Honours)

Type	Core	AEC	SEC	DSE	Gen
Credits	14 x 6 = 84	2 x 4 = 8	$2 \times 4 = 8$	4 x 6 = 24	4 x 6 = 24
I	HSC-HC-1016	ENG-AE-1014			HSC-HG-
	HSC-HC-1026				1XX6
II	HSC-HC-2016	ENV-AE-2014			HSC-HG-
	HSC-HC-2026				2XX6
III	HSC-HC-3016		HSC-SE-3XX4		HSC-HG-
	HSC-HC-3026				3XX6
	HSC-HC-3036				
IV	HSC-HC-4016		HSC-SE-4XX4		HSC-HG- 4XX6
	HSC-HC-4026				4/1/10
	HSC-HC-4036				
V	HSC-HC-5016			HSC-HE-5XX6	
	HSC-HC-5026			HSC-HE-5YY6	
VI	HSC-HC-6016			HSC-HE-6XX6	
	HSC-HC-6026			HSC-HE-6YY6	

CORE COURSES (14 Courses) Total Credits – 84

(6 credits each Theory 4 credits + Practical 2 credits =6)

- 1. HSC-HC-1016: Human Development I: The Childhood Years Theory 4 credits + Practical 2 credits
- 2. HSC-HC-1026: Food and Nutrition Theory 4 credits + Practical 2 credits
- **3. HSC-HC-2016: Dynamics of Communication and Extension** Theory 4 credits + Practical 2 credits
- **4. HSC-HC-2026: Resource Management** Theory 4 credits + Practical 2 credits
- **5. HSC-HC-3016: Introduction to Textiles** Theory 4 credits + Practical 2 credits
- **6. HSC-HC-3026: Communication Systems and Mass Media** Theory 4 credits + Practical 2 credits
- 7. HSC-HC-3036: Personal Finance & Consumer Studies Theory 4 credits + Practical 2 credits
- **8.** HSC-HC-4016: Human Development II: Development in Adolescence and Adulthood Theory 4 credits + Practical 2 credits
- **9. HSC-HC-4026: Nutrition: A Life Cycle Approach** Theory 4 credits + Practical 2 credits
- 10. HSC-HC-4036: Fashion Design Concepts Theory 4 credits + Practical 2 credits
- 11. HSC-HC-5016: Life Sciences Theory 4 credits + Practical 2 credits
- 12. HSC-HC-5026: Physical Science Theory 4 credits + Practical 2 credits
- **13. HSC-HC-6016: Research Methodology in Home Science** Theory 4 credits + Practical 2 credits
- **14. HSC-HC-6026: Socio Economic Environment** Theory 4 credits + Practical 2 credits

DISCIPLINE SPECIFIC ELECTIVE (4 Courses) Total Credits – 24

(6 Credits each – Theory 4 credits + Practical 2 credits = 2)

- 1. **HSC-HE-5016: Food Science** Theory 4 credits + Practical 2 credits
- 2. HSC-HE-5026: Indian Textile Heritage Theory 4 credits + Practical 2 credits
- 3. HSC-HE-5036: Child Rights and Gender Justice Theory 4 credits + Practical 2 credits
- **4. HSC-HE-5046: Basics of Interior Design and Hospitality Management** Theory 4 credits + Practical 2 credits
- **5. HSC-HE-5056: Extension for Development** Theory 4 credits + Practical 2 credits
- **6. HSC-HE-6016: Therapeutic Nutrition** Theory 4 credits + Practical 2 credits
- 7. **HSC-HE-6026: Apparel Production** Theory 4 credits + Practical 2 credits
- **8. HSC-HE-6036: Childhood Disability and Social Action** Theory 4 credits + Practical 2 credits
- 9. HSC-HE-6046: Interior Design & Decoration Theory 4 credits + Practical 2 credits
- **10. HSC-HE-6056: Entrepreneurship Development & Enterprise Management** Theory 4 credits + Practical 2 credits

SKILL ENHANCEMENT COURSES (2 Courses) Total Credit-8

- **1. HSC-SE-3014: Early Childhood Care and Development** Theory 2 Credit + Practical 2 credits
- 2. HSC-SE-3024: Surface Ornamentation Practical 4 credits
- 3. HSC-SE-3034: Maternal and Child Nutrition Theory 4 credits
- **4.** HSC-SE-4014: Information, Education and Communication Material for Development Theory 2 Credit + Practical 2 credits
- 5. HSC-SE-4024: Bakery Science Practical 4 Credit
- 6. HSC-SE-4034: Pattern making and draping Theory 1 Credit, Practical 3 Credit
- 7. HSC-SE-5014: Understanding Psychology Theory 4 Credit
- **8. HSC-SE-5024: Textile Processing** Theory 1 Credit + Practical 3 Credit
- 9. HSC-SE-6014: NGO Management & CSR Theory 4 credits
- 10. HCS-SE-6124: Commercial clothing Theory 1 Credit, Practical 3 Credit

GENERIC ELECTIVES (For other disciplines)

- 1. HSC-HG-1016 : Child Rights and Social Action Theory 5 credits + 1 Tutorial
- 2. HSC-HG-1026: Media, Culture and Society Theory 5 credits + 1 Tutorial
- 3. HSC-HG-2016: Human Nutrition Theory 4 credits + 2 Practical credits
- 4. HSC-HG-2026 : Appreciation of Textile Crafts Theory 4 credits + 2 Practical credits
- 5. HSC-HG-3016 : Adolescent Relationships Theory 4 credits + 2 Practical
- **6. HSC-HG-3026** : Current Concerns in Public Health Nutrition Theory 5 credits + 1 Tutorial
- 7. HSC-HG-4016: Entrepreneurship and Enterprise Management Theory 4 credits + 2 Practical credits
- **8. HSC-HG-4026** : **Interior Design** Theory 4 credits + 2 Practical credits

CORE COURSES

HSC-HC-1016: HUMAN DEVELOPMENT I: THE CHILDHOOD YEARS (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

15

Principles of Growth and Development	
Unit II: Prenatal Development, Birth and the Neonate	15
Reproductive health	
 Conception, Pregnancy and Birth 	
 Capacities and care of the new born 	
Unit III: Infancy and Preschool years	15
 Physical and Motor development 	
 Social and Emotional development 	
 Cognitive and Language development 	
Unit IV: Middle Childhood years	15

• Definition and Interdisciplinary nature of Human Development

• Scope of Human Development in contemporary society

PRACTICAL

1. Methods of study and their use (any one)

Unit I: Introduction to Human Development

• Domains, Stages and Contexts of development

• Interview (parents/guardians)

Physical and motor Development
Social and Emotional development
Cognitive and Language development

- Observation
- Narrative
- 2. Audio and video sources of studying prenatal development, infancy, early childhood and middle childhood period
- 3. Cultural practices related to pregnancy and infancy (survey and report writing)
- 4. Plan and develop activities to facilitate development in different domains. Preparation of material for parents and children (poster/toys/play material/quite books)

- Bee. H. (1995). The Developing Child. Harper Collins.
- Berk, L. E. (2007). Development through the lifespan. Delhi: Pearson Education.
- Rice. F. P. (1998). Human Development: A lifespan approach. New Jersey: Prentice Hall.
- Santrock, J. W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw- Hill.
- Singh, A. (Ed). 2015. Foundations of Human Development: A life span approach. New

Delhi: Orient BlackSwan.

HSC-HC-1026: FOOD AND NUTRITION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES:60

Unit I: Basic concepts in food and nutrition

5

- Basic terms used in study of food and nutrition (Food, Nutrition, Nutrients, nutritional ststus, malnutrition, health, optimum nutrition)
- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social

Unit II: Nutrients

20

Functions, Dietary Sources and clinical manifestations of deficiency/ excess of the following nutrients:

- Energy, Carbohydrates, lipids and proteins
- Fat soluble vitamins-A, D, E and K
- ullet Water soluble vitamins thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B₁₂ and vitamin C
- Minerals calcium, iron, zinc and iodine

Unit III: Methods of cooking

5

- Dry, moist, frying and microwave cooking
- Advantages, disadvantages and the effect of various methods of cooking on foods

Unit IV: Food Groups

25

- ICMR basic food groups
- Structure, composition, Products, nutritional contribution, selection and changes during cooking of the following food groups:
- Cereals
- Pulses
- Fruits and vegetables
- Milk & milk products
- Eggs
- Meat, poultry and fish
- · Fats and Oils
- Spices and herbs
- Beverages

Unit V: Nutrient losses in cooking and enhancing the nutritional quality of foods-

• Supplementation, Germination, Fermentation, Fortification and GM foods 5

PRACTICAL

1. Weights and measures of common food stuff (by household and standard methods); preparing market order and table setting

3

2. Food preparation, understanding the principals involved, nutritional quality and portion size.

- Beverages: Hot tea/coffee, Milk shake/lassi, fruit based beverages
- Cereals: Boiled rice, pulao, chapatti, parantha, puri, pastas
- Pulses: Whole, dehusked
- **Vegetables:** curries, dry preparations
- Milk and milk products: Kheer, custard
- Egg preparations: Boiled, poached, fried, scrambled, omelettes, egg pudding

RECOMMENDED READINGS

- Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Srilakshmi (2007). Food Science, 4th Edition. New Age International Ltd.
- Wardlaw and Insel MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition. Mosby.
- Chadha R and Mathur P (eds). Nutrition: A Lifecycle Approach. Orient Blackswan, New Delhi. 2015
- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). *The Art and Science of Cooking: A Practical Manual*, Revised Edition. Elite Publishing House Pvt Ltd.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation:

A Complete Manual, Fourth Edition. Orient Black Swan Ltd.

HSC-HC-2016: DYNAMICS OF COMMUNICATION AND EXTENSION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES 60

Unit I: Communication: Concepts

18

- Concept and nature
- Functions of Communication- inform, influence, persuade, motivate.
- Types of Communication
 - Intra personal, interpersonal, group, public, mass communication
 - Formal and informal communication
 - Verbal and Non-verbal Communication
 - Oral, Written and Visual communication
- Scope of Communication in
 - Education, training and learning industry,
 - Motivation and Management
 - Corporate Communication
 - Management of Organisations
 - Advertising and Public relations
- Communication and mainstream media newspaper, radio, television and Cinema, ICTs and web based communication
- Communication for social change

Unit II: Understanding Communication

20

Culture and communication

- Principles of Communication- 7 Cs communication principles
- Elements of Communication and their characteristics- sender, receiver, message, channel, feedback and noise.
- Models of Communication: Lasswell model, Shanon and Weaver model, Osgood and Schramm model.
- Barriers to Communication: Sender-oriented barriers, Receiver-oriented barriers, Channel-oriented barriers

Unit III: Communicating Effectively

8

Concept, nature and relevance to communication process:

- Empathy
- Persuasion
- Perception
- Listening

UNIT III: Communication for Extension

4

- Concept & Principles of Extension
- Methods & Media for Community Outreach
 - Methods based on number of persons contacted
 - Individual Home & Farm Visits, Office Calls, Letters
 - Group Meetings, Demonstrations
 - Mass Print, Broadcast, Exhibitions, Campaigns
 - Aids/Media
 - Audio Radio, Recordings, Cassettes & CDs
 - Visual Comics, Charts, Posters, Pictures, Handouts, Models
 - Audio-visual Presentations, TV, Cinema, Films, Documentaries
- Relationship between Communication, Extension & Communication

Practical:

- Developing skills in planning & conducting small group communication Lecture/Demonstration/Group Discussion
- 2. Review of some local & national dailies and TV channels on media coverage of selected developmental issues
- 3. Design & develop media for communication in Extension Leaflet, Poster, Chart, PowerPoint Presentation

- Barker, L. (1990). "Communication", New Jersey: Prentice Hall, Inc; 171.
- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Patri and Patri (2002); Essentials of Communication. Greenspan Publications

HSC-HC-2026: RESOURCE MANAGEMENT (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

 Unit I: Introduction to Resource Management Concept, universality and scope of management Approaches to management 	18
• Ethics in management	
Motivation Theory	
Unit II: Resources	18
 Understanding meaning, classification and characteristics of rutilization of resources. 	resources, factors affecting
 Maximizing use of resources and resource conservation. 	
Availability and management of specific resources by an indivMoney	vidual/ family
- Time	
- Energy	
- Space	
Unit III: Functions of Management: An overview	24
Decision Making	
• Planning	
• Supervising	
• Controlling	
• Organizing	
• Evaluation	
• Application of Management Process in:	
 Event Planning & Execution 	
PRACTICAL	
1. Resource conservation and optimization/green technologies	(natural resources- land,
electricity and water): Portfolio	3
2. Identification and development of self as a resource.	3
- SWOT analysis-who am I and Micro lab	
 Building Decision Making abilities through management gan 	
3. Preparation of time plans for self and family	3
4. Time and Motion Study (pathway, process, operation chart)	3
5. Event planning ,management and evaluation-with reference	to 2
- Managerial process	. 1
- Resource optimization - time, money, products, space, huma	n capital

RECOMMENDED READINGS

• Koontz.H. and O'Donnel C., 2005, Management – A systems and contingency analysis of managerial functions. New York: McGraw-Hill Book Company

- Kreitner. 2009, Management Theory and Applications, Cengage Learning: India
- Rao V.S. and Narayana P.S., Principles and Practices of Management, 2007, Konark Publishers Pvt. Ltd.

HSC-HC-3016:INTRODUCTION TO TEXTILES (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Introduction to textile fibres - Morphology of textile fibres - Primary and secondary properties - Fibre classification	8
Unit II: Production, properties and usage of fibres	16
Unit III: Production and properties of Yarns - Yarn construction: Mechanical Spinning (Cotton system, Wool system, Worsted system) Chemical Spinning (Wet, Dry, Melt) - Types of yarns: Staple and Filament, Simple yarns, Complex yarns - Yarn Properties-Yarn Numbering, Yarn Twist - Textured yarns: Types and properties - Difference between Threads and Yarns - Blends: Types of blends and purpose of blending	10
Unit IV: Techniques of fabric construction Weaving - Parts of a loom - Operations and motions of the loom - Classification of weaves- construction, characteristics, usage	12
Knitting -Classification of knits -Construction and properties of warp and weft knits	6
Non-wovens -Types (spun lace, heat-bonded, pulp air-laid, wet, spun bond, melt blown, acupunct stitch.) - Construction - Properties and usage	cure,
Unit V: Basics of Wet Processing • Classification and uses of finishes	5

• Fundamentals of dyeing and printing

PRACTICAL

1. Fibre Identification tests –Visual, burning, microscopic and chemical		2
2. Yarn Identification – Single, ply, cord, textured, elastic, monofilament,		2
multifilament and spun yarn		
3. Thread count	2	
4. Dimensional stability	1	
5. Weaves- Identification and their design interpretation on graph		2
6. Fabric analysis of light, medium & heavy weight fabrics (five each)		3
- Fibre type		
- Yarn type		
- Weave		
- GSM		
- End use		
- Trade name		
7. Tie and Dye	3	
8. Visit to a Handloom sector.	1	

RECOMMENDED READINGS:

- 1. Corbman, P.B., (1985) Textiles- Fiber to Fabric (6th Edition), Gregg Division/McGraw Hill Book Co., US.
- 2. Joseph, M.L., (1988) Essentials of Textiles (6th Edition), Holt, Rinehart and Winston Inc., Florida.
- 3. Vilensky G., (1983) Textile Science, CBS Publishers and Distributors, Delhi.
- 4. Tortora, G. Phyllis, Understanding Textiles, McMillan Co. USA.
- 5. Sekhri S., (2013) Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning, Delhi

HSC-HC-3026: COMMUNICATION SYSTEMS AND MASS MEDIA (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES 60

Unit I: Self and Communication

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- Awareness of self in communication listening, speaking, writing, interpreting & body language
- Intrapersonal Communication
- Self-concept and self-esteem

Unit II: Interpersonal Communication

- Interpersonal communication concept, types (dyadic, small group, public, mass, organizational & intercultural) and functions (linking, mentation & regulatory)
- Stages of Interpersonal Communication Phatic, Personal & Intimate Stage
- Iohari window

- Dyadic communication forms (face-to-face, telephonic, interview, instruction & dictation)
- Small group communication: characteristics (size, interdependence & task) & types (primary, social, self-help, learning, service, work & virtual groups)

Unit III: Organization, Public and Mass Communication

25

- Organizational communication: concept, types (formal/informal, upward/downward/horizontal, oral/verbal/written)
- Public communication- concept and techniques (speeches, meetings, demonstrations, discussions etc.)
- Mass Communication- concept, significance, functions (transmission, surveillance, correlation, mobilization, validation & entertainment) and elements (sender, receiver, medium, channel, noise, feedback)
- Theories of mass communication
 - Magic Bullet/Hypodermic Needle/Stimulus Response theory
 - Selectivity Theory
 - Agenda Setting Theory
 - Cultivation Theory
 - McLuhan Theory Medium is the message/Global Village
- Intercultural communication- concept and stages (denial, defense, minimization, acceptance, adaptation & integration
- Relationship between culture and communication

Unit IV: Mass Media

15

- Print Media: types, nature, characteristics, reach, access.
- Radio: types, nature, characteristics, reach, access.
- Television and cinema: types, nature, characteristics, reach, access.
- ICTs: types, characteristics, reach and access.

PRACTICAL

- 1. Know yourself exercises identifying strengths & weaknesses, listening skills, speaking skills, corrective courses, alternatives 3
- 2. Studying group dynamics in organizations formal and informal (in terms of self-definition, group size, purpose, vision, common goals/objectives, organizational structure, rules and regulations, frequency of interactions, recognitions received, etc.

3. Audience analysis – readership, listenership and viewership studies (selected local & national daily newspapers, FM & TV channels)
5

4. Content analysis of mass media (selected local & national daily newspapers, FM & TV channels)

- Devito, J. (1998) Human Communication. New York: Harper & Row.
- Barker, Larry Lee. (1990) Communication. Eaglewood Cliffs, New Jersey: Prentice Hall.
- McQuail, D. (2000) Mass Communication Theories. London: Sage Publications
- Baran, Stanley J (2009). Introduction To Mass Communication, McGraw hill medical

publishing

- Baran, Stanley J (2014). Mass Communication Theory, Wadsworth Publishing
- Vivian, J (2012). The Media Of Mass Communication, Pearson
- \bullet Dominick, Joseph R. (2012). Dynamics of mass communication: media in transition , McGraw hill education

HSC-HC-3036: PERSONAL FINANCE AND CONSUMER STUDIES (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Income and Expenditure 18		
• Household Income – Types, Sources, Supplementation of family income, us	se of fam	ily
income, budgets, maintaining household accounts		
Factors influencing expenditure pattern		
• Family savings and investments- need ,principles, channels of investment,	tax	
implications		
Consumer credit- need, sources, credit cards, Housing finance		
Personal finance management – tax implications		
Guidelines for wise buying practices		
Unit II: Consumer in India: Consumer problems and education 20		
Definition of a consumer		
• Role of consumers in the economy, National Income, Per Capita Income, Ho	ousehol	d wise
distribution of income		
 Changing nature of the business world –e-commerce, e-business 		
• Types of consumer problems – products and service related, investment and	nd	
infrastructure related, Causes and solutions		
Consumer education and empowerment		
Unit III: Consumer Protection 22		
Consumer protection		
 Consumer rights and responsibilities 		
 Consumer organizations – origin, functioning, role and types. 		
• Consumer cooperatives – role, PDS Kendriya Bhandars.		
• Basic legislative framework for consumer protection in India, Consumer Protection	rotectio	n Act
1986 COPRA, Alternative redressal mechanisms, Mediation centres		
• Standardization and quality control measures: ISI, FSSAI, AGMARK, ISO, Ec		
Wool mark, Silk mark, Cotton mark, Handloom mark, BEE star labelling and	others	
• Regulations on Food Labelling and Claims: FSSAI, Codex for consumers		
PRACTICAL		
1. Evaluation and designing of advertisements in the print media including	_	
products, services and social ads.	3	
2. Evaluation and designing of informative and attractive labels of differen	t	_
type of food products.		3
3. Case study of banks and post offices to understand their services and	2	
Products.	3	
4. Food adulteration tests (milk, tea, oil, spices)	2	

RECOMMENDED READINGS

- Khanna S.R., Hanspal S., Kapoor S. & Awasthi H.K., 2007, Consumer Affairs, Universities Press India Pvt. Ltd.
- Sawhney, H.K. & Mital, M., 2007, Family Finance & Consumer Studies, Elite Publishing House Pvt. Ltd.
- Seetharaman, P. and Sethi, M.,2001, Consumerism: Strength and Tactics, New Delhi: CBS Publishers.

HSC-HC-4016: HUMAN DEVELOPMENT II : DEVELOPMENT IN ADOLESCENCE AND ADULTHOOD (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES :60

Unit I: Introduction to Adolescence.

20

- Developmental tasks during Adolescence
- Puberty, sexual maturity, nutrition, health, and psychological well-being
- Self and identity
- Family and peer relationships
- Adolescent interface with media

Unit II: Cognitive, Language and Moral development. 15

- Perspectives on cognitive development
- Development of intelligence and creativity
- Adolescent language
- Adolescent morality

Unit III: Introduction to Adulthood.

15

- Definitions, transition from adolescence to adulthood
- Developmental tasks of adulthood
- Physical and physiological changes from young adulthood to late adulthood
- Significance of health, nutrition, and well being

Unit IV: Socio-emotional and Cognitive development. 10

- Diversity in roles and relationships
- Marriage-contemporary trends
- Parenting and grand parenting

PRACTICAL

- 1. To study physical and sexual changes in adolescence
- 2. Case profile of an adolescent- including study of self, family relationships and peer relationships.
- 3. Use of interview/questionnaire method to study adult roles (at least one male and female)
- Father/husband
- Home maker
- Employed woman

- Grandfather/Grandmother
- Single parent
- College-going young adults
- 4. Familiarity with Psychological Tests of Intelligence and Personality- any two

RECOMMENDED READINGS

- Berk, L. E. (2007). Development through the lifespan. Delhi: Pearson Education.
- Rice. F. P. (1998). Human Development: A lifespan approach. New Jersey: Prentice Hall.
- Rutter, M. and Rutter, M. (1992) Developing Minds. Challenge and continuity across the life span. London: Penguin.
- Santrock, J. W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw-Hill.
- Singh, A. (Ed). 2015. Foundations of Human Development: A life span approach. New Delhi: Orient BlackSwan.
- Tennant, M. and Pogson, P. (1995) Learing and Change in the Adult Year, San Francisco: Jossey-Bass.

HSC-HC-4026: NUTRITION: A LIFE CYCLE APPROACH (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Principles of meal planning

12

- Food groups and Food exchange list
- Factors affecting meal planning and food related behavior
- Methods of assessment of nutrient requirements
- Dietary guidelines for Indians

Unit II: Nutrition during adulthood

20

Physiological changes, RDA, nutritional guidelines, nutritional concerns, energy balance and

healthy food choices.

- Adults
- Pregnant women
- Lactating mothers
- Elderly

Unit III: Nutrition during childhood

20

Growth and development, growth reference/standards (by ICMR and NCHS standards), RDA, nutritional guidelines, nutritional concerns, and healthy food choices.

- Infants
- Preschool children
- School children
- Adolescents

Unit IV: Nutrition for special conditions

8

• Nutrition for physical fitness and sport

- Feeding problems in children with special needs (premature baby, low birth weight babies)
- Considerations during natural and man-made disasters e.g. floods, war

PRACTICALS

1. Introduction to meal planning

2

- Rich sources of nutrients
- Use of food exchange lists
- 2. Planning nutritious diets for:

10

- Young Adult
- Pregnant/ Lactating woman
- Preschooler
- School age child/Adolescent
- Elderly
- 3. Planning and preparation nutrient rich snacks/dishes for:

4

- Infants (Complementary foods)
- Children/Adults/Elderly (Snacks, baked products, salads and soups)

RECOMMENDED READINGS

- Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Khanna K, Gupta S, Passi SJ, Seth R, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House.
- Wardlaw GM, Hampl JS, DiSilvestro RA (2004). Perspectives in Nutrition, 6th edition. McGraw Hill.
- Chadha R and Mathur P (eds). Nutrition: A Lifecycle Approach. Orient Blackswan, Delhi. 2015
- Gopalan C, Rama Sastri BV, BalasubramanianSC (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, ICMR, Hyderabad.
- Seth V and Singh K (2005). Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual. Elite Publishing House Pvt. Ltd. New Delhi.

HSC-HC-4036: FASHION DESIGN CONCEPTS (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES (60)

Unit I: Fashion 16

- Terminology
- Fashion cycle
- Sources of fashion
- Factors favouring and retarding fashion
- Role of a Designer
- Leading Fashion centres and designers

Unit II: Importance of clothing

- Clothing functions and theories of origin
- Clothing terminology
- Individuality and conformity, conspicuous consumption and emulation
- Selection of clothes for self
- Selection and Evaluation of ready-made garments

Unit III: Components of garment: classification and application

20

- Fabric, seams, stitches, thread, shaping methods, dart equivalents
- Sleeves, cuffs, necklines, collars, plackets, yokes, pockets and trims
- Style variation: bodice, skirts, trousers in various silhouettes

Unit IV: Design

8

- Elements and principles of design
- Structural and applied design

PRACTICAL

- 1. Flat sketching of garment components
- 3

2. Identification of garment components

- 2
- 3.Development and identification of seams, plackets, fasteners, edge finishing (binding, facing), fullness
- 5
- 4. Interpretation of elements and principles of design concepts from print and visual mediums $\, \mathbf{3} \,$
- 5. Study of collections of famous designers

2

6. Visit to Apparel production centre.

1

RECOMMENDED READINGS:

- Brown, Patty, Rice J., 1998, Ready to Wear Apparel Analysis. Prentice Hall.
- Marshall S G, Jackson H O, Stanley MS, Kefgen M & Specht T, 2009, Individuality in Clothing & Personal Appearance, 6th Edition, Pearson Education, USA.
- Mazumdar, L,.&Vatsala, R,. 2004, Textbook of Fundamentals of Clothing Construction, Director of Information & Publications of Agriculture Indian Council of Agricultural Research, KrishiAnusandhanBhawan, PUSA, New Delhi
- Tate S.L., Edwards M.S., 1982, The Complete Book of Fashion Design, Harper and Row

Publications, New York.

HSC-HC-5016: LIFE SCIENCES (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60 SECTION A - BOTANY

Unit I: Introduction to Plant Kingdom

Classification of Plant Kingdom	
• Formation of fruit, seed and embryo	
UNIT II: Propagation of plants – seed and vegetative	8
• Seed Propagation	
• Cuttings – stem, leaf and root	
Unit III: Types of Garden	8
Ornamental garden	
• Kitchen garden	
• Herbal Garden	
Unit IV: Economic Botany	7
Bio chemical Constituents and economic uses of:	
 Vegetables- Carrot, tomato, onion, fenugreek 	
• Fruits-papaya, mango.	
• Spices and Condiments-clove, pepper, Coriander.	
1 11 /	

SECTION B- ZOOLOGY

8 Classification of animal kingdom • Cell theory, electron microscopic structure and function of a cell

Unit II • Parasites and human diseases (hook worm, round worm, tape worm, giardia, thread worm)

- Economics importance and control of common household pests (Ants, Cockroach, rodents, mosquito)
- Insects as a resource

Unit III 5

- Introduction to Biotechnology
- Significance of biotechnology to humans

8 **Unit IV**

- Vermicompositing
- Technology, importance and its relevance
- How to start a unit at home.

PRACTICAL

SECTION A-BOTANY

- Floral description of few angiospermic families
- Propagation of plants by seed and vegetative methods
- Identification of economically important plants
- Visit to ornamental/botanical garden/horticultural farm/tea garden.

SECTION B-ZOOLOGY

- Survey of animal kingdom (2-3 specimens from each class/phylum)
- Study of cells different types of blood groups.
- Vermi composting

- 1. Chadha K.L.2012. Handbook of Horticulture. ICAR Publication.
- 2. Gopalaswamiianger K.S. 1991, Complete gardening in India, Messers Nagaraj And Co. Madras
- 3. Hartman H.T and Kester D 1986.:Plant Propagation, Principles and Practices Prentice Hall of India Pvt. Ltd. New Delhi.
- 4. Raven P. and Johnson G. 2010. Biology. Mc Graw Hill Science.
- 5. Soni N.K. and Soni V. 2010. Fundamentals of Botany. Tata Mc Graw Hill Education.
- 6. Jordan and Verma, 1998, Invertebrate Zoology, S. Chand and Co. Ltd
- 7. Kotpal, 2000, Modern Textbook of Zoology, Rastogi Publications
- 8. Winchester, A.M. 1967, Genetics, Oxford and IBH Publishing Company
- 9. Vij and Gupta (2011) Applied Zoology Phoenix Publishing House

HSC-HC-5026: PHYSICAL SCIENCE (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

SECTION A - CHEMISTRY

Unit I: Carbohydrates

10

Classification of carbohydrates: Monosaccharides, Disaccharides, Oligosaccharides and Polysaccharides, Functions

Unit II: Lipids

7

Classification: Simple lipids, Complex or compound lipids, Derived lipids. Functions.

Unit III: Amino acids

8

Classification, Protein Efficiency Ratio, Biological Value, Net Protein Utilization, enzyme

Unit IV: Dyes

5

Concept and application of natural and chemical dyes.

SECTION B- PHYSICS

Unit VI: House hold Equipment and Consumer Awareness 10

- Motorized equipments: Vacuum cleaners, Clothes washing machine, Dish washers, Food processors, Electric chimney.
- Heating appliances: Electric irons, Electric water heaters, Gas and electric cooking Ranges, Solar Energy and its applications.
- Cooling appliances: Refrigeration and air conditioning.
- Guarantee and warranty of all household equipments, Precautions while using equipments and servicing of equipment used.

Unit VII : Electricity

7

- Safety features in household electric wiring fuse, MCB, Earthing,
- Concept Battery charger, Invertor, UPS, Voltage stabilizer.
- Lighting fixtures in the home –Fluorescent tube, CFL, LED, Halogen lamp.

Unit VIII: Sound and Light

- Knowledge of sound, echo and their uses.
- Recording and reproduction of Sound various methods.

• Lenses- convex and concave, focal length.

Unit IX Modern Physics and Electronics

- Radioactivity concept and application.
- Concept of Laser and its applications.

PRACTICAL

PART A - CHEMISTRY

- 1. Determination of hardness and softness of water.
- 2. Qualitative test for carbohydrates
 - a) Molisch's test
 - b) Iodine test
 - c) Benedict test.

PART B- PHYSICS

1. To study the function and working principles of- pH meter, single pan balance, electronic digital balance, water bath, centrifuge, desicator, colorimeter, hot air oven. (any three)

5

- 2. To study household electrical wiring and fix a bedside switch in the circuit.
- 3. To repair and test an electric iron.
- 4. To repair the given chord and fuse and test them.

Demonstration experiments

- 1. To study the various sources of light and record their wattages.
- 2. To obtain a pure spectrum of various sources of light (Na and Hg) using a spectrometer.

- Morrison, R. T. and Boyd, R. N., Organic Chemistry, (2001), 7th edition, Prentice Hall.
- Graham Solomon, T.W. Organic chemistry 10th Ed. (2009) John Wiley and sons, Inc.
- Voet, D and Voet, J, Principles of Biochemistry, 4th edition (2011) by John wiley and sons.
- Nelson, D.L. and Cox, M.M., Lehninger's principles of Biochemistry, 6th edition, (2012) W.H. Freeman.
- P.C. Jain, Monika Jain, Engineering Chemistry, Dhanpat Rai Publications (1979)
- Berg, J. M., Tymoczko, J.L. and Stryer, L. (2012). Biochemistry 7th Ed., W. H. Freeman
- Household Physics (2012), Claude H. Brechner, Hardpress.
- Applied Photography Optics, 3rd Edition, Sidney E. Ray, Focal Press 2002.
- Modern Physics, Murugeshan, S. Chand and Co., 2002.
- Engineering Physics: Fundamentals and modern applications, P. Khare and A. Swarup, Jones and Barlett Publishers, 2010.
- Principles of Instrumental Analysis, 6th edition (2006), D.A. Skooget. al., Saunders College Publishing.
- Murugeshan, Modern Physics, S. Chand and Co., 2002.
- Bhatia, K.B., Elements of Electrical Gadgets, Arya Book Depot, 1993.
- Principles of Instrumental Analysis, 6th edition (2006), D.A. Skooget. al., Saunders College Publishing.

- Practical Organic Chemistry by Vogel A. I., Orient Longmans Limited.
- Ahluwalia, V. K., Dhingra, S., Gulati, A., College Practical Chemistry, University Press (India) Pvt. Ltd. (2005)
- B.Sc. Practical Chemistry by P. L. Soni and S. C. Jain, Sultan Chand and Sons (1978).
- College Practical Physics by Khanna and Gulati, S. Chand and Co., (1999)

HSC-HC-6016: RESEARCH METHODOLOGY IN HOME SCIENCE (CREDITS: THEORY-4, PRACTICAL-2)

THEORY LECTURES: 60 20 Unit I: Research- Meaning, purpose and approaches

- Exploration, Description, Explanation
- Scientific method and research
- Research Designs –Experimental and Observational
- Quantitative and Qualitative approaches

Conceptualization and Measurement

- Variables, concepts and measurement
- Levels of measurement
- Units of analysis

Unit II: Sampling & Tools

20

- Role of sampling in research
- Types of sampling

Research Tools and Techniques

- Validity and reliability
- Interviewing and observational methods

Unit III: The Research Process

20

- Defining the problem, research questions, objectives, hypotheses
- Review of related literature and originality in writing
- Planning the research
- Subjects context and ethics
- Methodology and tools
- Citation formats: in medical sciences, social sciences

PRACTICAL

- 1. Exercise in sampling, random number table.
- 2. Exercise in designing tools and their analysis: interview, questionnaire.
- 3. Data collection process: conducting interviews, FGDs, case studies

- Kumar, R. (2005) Research Methodology: A Step by Step Guide for Beginners. Sage Publications, New Delhi.
- Kerlinger F. N. and Lee, H.B. (2000) Foundations of Behavioural Research 4th Ed. Harcourt College Publishers
- Kothari, C. R. (2008) Research Methodology: Methods and Techniques 2nd Ed. New Age International Pvt Ltd, New Delhi.

• Black, J.A. & Champion, D. J. (1976) Methods and Issues in Social Research. New York: John Wiley and Sons.

HSC-HC-6026: SOCIO ECONOMIC ENVIRONMENT (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Part 1: Sociological Concerns and Orientation

Unit I Sociological Orientation

- Society, Culture and Institutions
- Social Groups and multiplicity

Unit II Emergence of New Ideological Orientations

- Social mobility and social change
- Sociological Studies of Children, Youth and Women the aged: Empirical Problem & Frameworks.

Part II: Economic Theory and Environment

Unit III: Introduction – Economic system, Consumption and production and distribution

- Definition, scope of Economics, Central problems of an economy
- Wants Classification and Characteristics.
- Utility Law of Diminishing Marginal Utility, Law of Equi-Marginal Utility
- •Demand Law of Demand, Elasticity of Demand.
- Engel's Law of Consumption, consumer's surplus
- Supply Law of Supply, Elasticity of Supply, equilibrium of Demand and Supply.
- Factors of Production land, labour and capital, National Income estimates
- Types of Markets

Unit IV:Indian Economic Environment

- Structure of Indian Economy: Changing structure of Indian Economy.
- Role, importance and organization of Indian Agriculture.
- Resent developmental programmes of the Government of India:Jana Dhana Yojna, Sarva Siksha Yojana.

PRACTICAL

Part 1 Practical

- Changing families & relating in society.
- Changing status and roles in varied spaces in family, work the elderly and its implication on the individual and society across cultures.

Part II Practical

- Field Visit (to do the comparative economic studies)
- Data interpretation and analysis (to see the trends of growth and development of certain sectors or vice versa.)

- Abhraham, M. F. (2006). Contemporary Sociology: An introduction to concepts and theories: New York: Oxford University Press.
- Beattie, J. (1964). Other cultures. Cohen and West.

- Das, V. (Ed.) (2003) The Oxford companion to sociology and social anthropology: volume 1 and 2.New Delhi: Oxford University Press.
- Johnson, M.H. (2001). Sociology: A systematic introduction. New Delhi: Allied Publishers Limited.
- Rawat, H.K. (2007). Sociolgy: Basic concepts. New Delhi: Rawat Publications.
- Srinivas, M.N. (Ed.) (1996). Caste: Its twentieth century avatar. New Delhi: Viking Penguin.
- Ahuja H.L., 2010, Modern Micro Economics. Sultan Chand & sons
- Dhingra IC and Garg VK, 2010, Introductory Economic Theory. Sultan Chand & Sons
- Mishra & Puri, Recent edition 2014, Indian Economy, Himalaya Publishing House.
- Mithani D.M., 2010 New Edition, Macro-Economics. Himalaya Publishing House
- Sundaram K.P.M., 2010, Introduction to Economics. Ratan Prakashan

DISCIPLINE SPECIFIC ELECTIVE (DSE)

HSC-HE-5016: FOOD SCIENCE (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Introduction to food science

- Definition, importance and applications
- Basic terminology used in food science

Unit II: Basic food chemistry

10

- Sources, chemistry and functional properties of Carbohydrates, Lipids and Proteins.
- Colloidal chemistry: Definition, classification, properties and applications of sols, gels, foams and emulsions.

Unit II: Basic food microbiology

- 8
- Introduction to yeast, mold and bacteria Characteristics and their role in preservation and spoilage of food.
- Hygiene and sanitation practices in food processing and waste disposal.

Unit III: Preservation techniques, principles and their applications 20

- High temperature, low temperature, removal of moisture, irradiation and additives.
- Food packaging and labeling: FSSAI, Codex

Unit IV: Sensory science

8

- Physiological basis of sensory evaluation and sensory attributes of food.
- Sensory evaluation: Assessment, subjective and objective.

Unit V: Food Laws and Quality Assurance 8

- National and International food laws FSSAI, BIS, AGMARK, Codex and ISO:
- 22000, ISO: 9000, ISO: 14000.
- Quality Assurance procedures GMP, GHP, HACCP

PRACTICAL

- 1. Formation of different stages of sugar syrup.(soft ball stage, ,soft ball stage, hard ball stage.
- 2.Determination of a suitable method of preparing a stable emulsion
- 3. Study the effect of various additives on stability of egg white foam.
- 4. Determination of gluten content.
- 5. Assessment of hygienic practices of food handlers
- 6. Moisture removing techniques in foods.
- 7. Conduct a descriptive analysis of a given sample of white / brown bread on the basis of its sensory attributes.
- 8. Evaluation of food labels

- Frazier W. C. and Westhoff D. C. (1988). Food Microbiology, 4th Edition.
- Manay S. and Shadaksharaswamy M (2002). Foods Facts and Principles. Wiley Eastern Ltd.

- Potter H (1995). Food Science, 5th Edition. CBS Publishers & Distributors.
- Srilakshmi (2007). Food Science, 4th Edition. New Age International Ltd.
- www.fssai.gov.in
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation:

A Complete Manual, Fourth Edition. Orient Black Swan Ltd.

ullet Sethi Mohini and Rao E (2011). Food Science (Experiments and Applications), 2_{nd} Edition. CBS Publishers

& Distributers Pvt. Ltd.

HSC-HE-5026: INDIAN TEXTILE HERITAGE (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit 1:

Study of Textile Crafts of India: with reference to history, production centers, techniques, designs, colours and products

- Woven Textiles-Benaras Brocades, Jamdanis and Baluchars of Bengal, Kani
 Shawls of Kashmir, Textiles of North Eastern India,
- Embroidered Textiles- Kanthas of Bengal, Kasuti of Karnataka, Phulkari
 14

of Punjab, Chikankari of Uttar Pradesh, Kashida of Kashmir, Kathi of Gujarat, Shamilami of Manipur

- Painted and Printed textiles Kalamkaris of Andhra Pradesh, Dabu printing of Rajasthan, Ajarakh prints of Gujarat
- Dyed textiles –Bandhanis of Rajasthan and Gujarat, Ikats&Patola of Gujarat,
 Bandhas of Orissa, TeliaRumal of Andhra Pradesh, Pochampally of Telengana

Unit 2: Conservation of Traditional Textiles

- Factors influencing degradation of textiles
- Care and storage techniques

Unit 3: Status of Traditional Textiles in Modern India

8

3

- Evolution and socio-economic significance of Khadi, Handloom and Handicraft sector
- Sustenance of traditional textile crafts
- Interventions by organizations

PRACTICAL

1. Traditional Embroideries - Kanthas, Kasuti, Ch	ikankari, Kashida, Shamilami, Kutch	5
2. Tie and dye	2	
3. Batik	2	
4. Block printing	2	
5. Portfolio and product development	3	
6. Visit to craft centers	1	
D		

Recommended Readings:

- 1. Agarwal, O.P., 1977, Care and Presentation of Museum projects II, NRL
- 2. Chattopadhaya, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi
- 3. Das, Shukla, 1992, Fabric Art-Heritage of India, Abhinav Publications, N Delhi
- 4. Mazumdar, L., 2013, Textile Tradition of Assam- an empirical study, Bhabani Offset Pvt. Ltd, Guwahati.

HSC-HE-5036: CHILD RIGHTS AND GENDER JUSTICE (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Introduction to Child Rights

- Child rights: concept
- Demographic profile of Indian children
- Disadvantage, deprivation and social exclusion with reference to children
- Laws, policies and programmes for children in India
- UNCRC

Unit II: Children in need of care and protection 15

- Vulnerable groups: causes and consequences
- Street, homeless, institutionalized and working children
- Child Abuse
- Child Trafficking
- Children in conflict with the law
- Children living with: chronic illness, HIV

Unit III: Social construction of gender

14

15

- Socialization for gender: gender roles, stereotypes and identity
- Gender in the workplace and in public spaces
- Contemporary influences: media and popular culture
- Demographic profile of women and children in India

Unit IV: Gender and Indian society

- Sex and Gender, Masculinity and Femininity, biological and cultural determinants
- Patriarchy and social institutions
- Being male and female in Indian society-social traditions and contemporary issues
- Exploring the issues of violence against females
- Laws, policies and programmes for children and women

PRACTICAL

- 1. Visits to organizations working in the area of Child Rights and Gender to understand their objectives, programmes and experiences.
- 2. Workshops on relevant issues like Gender, domestic violence, gendering of public spaces
- 3. Understanding child rights and gender issues in diverse social groups through field visits and interactions
- 4. Media portrayals of women and children.

RECOMMENDED READINGS

- Agarwal, A. & Rao, B.V. (2007). Education of Disabled Children. New Delhi: Eastern Book Corporation.
- Agnes, F. (1999). Law and Gender Inequality: The politics of Women's Rights in India. Oxford University Press.
- Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press.
- Kishwar, M. (1999). Off the Beaten Track: Rethinking Gender Justice for Indian Women. New Delhi: Oxford University Press.
- Satyarthi, K. and Zutshi, B. (Ed) (2006). Globalization, Development and Child Rights. New Delhi: Shipra Publication.
- Saikia, N. (2008). Indian women: A socio-legal perspective. New Delhi: Serials Publication.

HSC-HE-5046: BASICS OF INTERIOR DESIGN AND HOSPITALITY MANAGEMENT (CREDITS: THEORY 4, PRACTICAL 2)

THEORY LECTURES:

Unit: I Introduction to foundation of art and design

10

30

- Objectives of design: Beauty, Functionalism and Expressiveness
- Types of Design: Structural and decorative (Naturalistic, stylized, abstract and geometric; Modern and traditional design

Unit II Introduction to Elements and Principles of Design

- Elements of design:
 - o Line- Vertical, Horizontal and Dynamic lines (diagonal, zigzag and curved line)
 - Shape and form- Different shapes(square, rectangle, triangle, circle, semi-circle and polygon) and forms
 - o Space
 - o Pattern
 - Texture (soft and rough/ visual and actual)
 - Light(typeof lightings and their application)
 - Colour(Dimension of colour, colour wheel, type of colour schemes and their applications)

• Principles of design: Balance, Harmony, Scale, Proportion, Rhythm, Emphasis and their applications.

Unit: III Introduction to components of Interior Design 30

- Surface in Interior: wall finishes, floor finishes, ceiling finishes
- Furniture- types, construction, selection and arrangement
- Furnishing- softwindow treatment, upholstery, cushions and pillows, soft floor treatment (rug and carpet)
 - Types of accessories (Functional and decorative)

Unit: IV Introduction to Hospitality Industry

- **30**
- Importance & functions of housekeeping department in hospitality industry
- Functions and management of Food Service Department
- Introduction to front office department and personal management
- The functions of linen room and laundry
- Introduction to travel and tourism

PRACTICAL

- 1. Making drawing sheet on the following
- a) Types of lines
- b) Patterns
- c) Textures
- d) Color
- 2. Designs(structural, decorative, natural, stylized, abstract and geometric design)
- 3. Making Accessories: Application of elements and principles of design in creating
- 4. Visit to Architect Offices/ Interior Designs/ Sites/ ongoing completed projects Exhibitions/House design by project.
- 5. Demonstration on flower arrangement in relation to hospitality industry
- 6. Demonstration on Napkin folding
- 7. Demonstration on Table setting in Restaurants
- 8. Visit to hotels for providing exposure to various departments of hotels to documents records functions.
- 9. Collect information regarding places of tourist interest from various states of India.

- Andrews, S. (1982), "Hotel Front Office Training Manual". Tata McGraw Hill Publishing Co. Ltd, New Delhi.
- Andrews,S. (2000), "Food and Beverage Management," Tata McGraw Hill Publishing Co. Ltd, New Delhi..
- A.K.Bhatia, (1983), Tourism Development: Principles and Practices, 2nd Edition, Stealing Publishing Co., (Unit I-VII, IX), New Delhi.
- Andrew Sudhir (1985), Hotel Housekeeping- training manual. Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
- Botter and Lockart (1961), Design for you, John Willey & Sons Inc. New York
- Bhatt Pranav and Goenka Shanita (1990), The Foundation of Art and Design, Lakhani book Depot, Bombay.

- Birrel, Verla Leone, (1967), Color and Design: A Basic Text (Vol.I& II) Digest Submitted in requirement for the degree of education in Teacher college Columbia University.
- Craig Hazel and Rush Ole (1962), Homes with Character, Boston: D.C. Health and Co., ILK.
- Duncan, Miller (1949), Interior Decoration, London, The Publications, New York,
- Faulkner Sarah and Faulkner Ray (1960), Inside Today's Homes, Holt Rinchart and Winston Inc., New York.
- Gilliat Mary (1981), The Decorating Book, Dorling Kinderley Limited, London.
- Goldstein H. and Goldstein V. (1967), Art in Everyday Life, Oxford & IBH Publishing Co., New Delhi
- Gravas Maitland (1951), The art of Color and Design (2nd Edition), McGraw Hill books Comp. Ltd., New York.
- HalseAltert O. (1978), The Use of Color in Interior (2nd Ed.), McGraw Hill books Comp. Ltd., New York.
- Rutt, Anna Hong (1949), Home Furnishing, John Willey and Sons Inc., New York.
- Gandotra, V.; Shukul, M. and Jaiswal, N. (2010), Introduction to Interior Design and Decoration, Dominant Publishers and Distributors, Delhi.
- Seetharaman P, and Pannu, P (2005), Interior Design & Decoration, CBS Publishers & Distribution, New Delhi.

HSC-HE-5056: EXTENSION FOR DEVELOPMENT (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Concept of Extension 15

- Extension: concept, goals and history
- Adult learning components of Extension
- Extension systems- types, advantages and disadvantages
- Relationship between communication and extension role of extension in development

Unit II: Extension Methods and Approaches 20

- Stakeholders in development
- People's participation and social mobilization in development
- Leadership and extension- concept theories styles and types of leadership
- Diffusion of innovation and adoption
- Extension methods and approaches classification, characteristics and selection

Unit III: Development Programmes 25

- Development issues and goals- national and international perspectives
- National Development Programmes goals, strategies, structure and achievements
- Analysis of contemporary national development programmes- objectives, clients, salient features, outcomes and communication support.
- Behaviour Change Communication strategies in development programmes

PRACTICAL

1. Analysis of development programmes

- 2. Evaluate strategies used by development agencies for implementation of development programmes
- 3. Develop skills in planning and using individual and small group methods in extension **RECOMMENDED READINGS**
- Mikkelsen, Britha, (2002), Methods for Development Work and Research. New Delhi: Sage Publications
- Dale R, (2004) Evaluating Development Programmes and Projects. New Delhi : Sage Publications.
- Kumar & Hansra, (1997) Extension Education for Human Resource Development. New Delhi: Concept Publishers.

HSC-HE-6016: THERAPEUTIC NUTRITION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I Principles of nutrition care 8

- Nutrition Care Process
- Therapeutic adaptations of the normal diet
- Progressive diets clear fluid, full fluid, soft and regular

Unit II Etiology, clinical features and nutritional management of Infections and Fevers 8

- Typhoid
- Tuberculosis
- HIV

Unit III Etiology, clinical features and nutritional management of the following 18

- GI Tract Disorders:
- o Diarrhoea
- Constipation
- Lactose intolerance
- o Celiac disease.
- Liver: Infective Hepatitis

Unit IV Etiology, clinical features and nutritional management of 10

- Weight Imbalances-Overweight and obesity; Underweight
- Eating disorder- anorexia nervosa and bulimia

Unit V Etiology, clinical features, basic diagnosis and nutritional management of the Following 12

- Type 1 and Type 2 Diabetes Mellitus
- Metabolic Syndrome
- Hypertension and Coronary Heart Disease

Unit VI Food allergy and food intolerance 4

• Etiology, clinical features, diagnosis and nutritional management

PRACTICAL

Planning, preparation and service of diets for the following:

Therapeutic Diets - Normal, Soft, Clear and full fluid

- i. Fevers: acute and chronic
- ii. Obesity
- iii. Type 2 Diabetes

- iv. Hypertension and CHD
- v. Survey therapeutic foods in market

vi Visit to dietetic department of hospitals.

RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). *Textbook of Nutrition and Dietetics*. Phoenix Publishing House Pvt. Ltd.
- Mahan L K and Escott Stump S (2013). *Krause's Food & Nutrition Therapy*, 13th ed. Saunders-Elsevier.
- Stacy Nix (2009). *William's Basic Nutrition and Diet Therapy*, 13th Edition. Elsevier Mosby.
- ICMR (1999). *Nutritive Value of Indian Foods*. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Seth V and Singh K (2007). *Diet Planning through the Life Cycle Part II: Diet Therapy. A Practical Manual*, 4th edition. Elite Publishing House Pvt. Ltd.

HSC-HE-6026: APPAREL PRODUCTION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Introduction to pattern making

10

- Importance of taking body measurements
- Importance of patterns and pattern information
- Methods of pattern making
- Rules of pattern making
- Principles of pattern making

Unit II: Preparatory steps for garment construction

12

- Fabric grain
- Preparatory steps- preshrinking, straightening and truing
- Layouts for patterns- general guidelines, basic layouts- lengthwise, partial lengthwise, crosswise, double fold, open, combination fold
- Pinning, marking and cutting
- Layouts for fabrics- Unidirectional, bold and large prints, plaids, stripes and checks, various widths of fabrics

Unit III: Seams and finishing of raw edges

12

- Types of seams- Basic seams and its finishing,
- Additional seam techniques: clipping, notching, grading, trimming, easing, under stitching, stay stitching, trimming a corner.
- Crossway strips-importance and applications
- Finishing of hemlines

Unit IV: Study of garment components: application and construction

• Classification and application of sleeves, cuffs, collars, necklines, plackets, pockets, yokes, trims and accessories

UNIT V: Design & Fit

11

- Designing for different figure types
- Fit: Fitting area, fitting guidelines, fitting procedure

PRACTICAL

- 1. Development and identification of seams, plackets, fasteners, edgefinishing 4 (binding, facing), fullness
- 2. Development of bodice, skirt and various sleeves and collars for self

3

- 3. Develop style variations in adult bodice using dart manipulation on half scale standard block ${\bf 3}$
- 4. Adaptation of basic skirt block into style variations (Half scale)
- 5. Construction of skirt for self

2

1

6. Construction of skirt top/kurta for self

2

RECOMMENDED READINGS

- Armstrong, H.J., 2009, Pattern Making for Fashion Design, Harper Collins PublishersInc., Nev York.
- Mazumdar, L,.&Vatsala, R,. 2004, Textbook of Fundamentals of Clothing Construction, Director of Information & Publications of Agriculture Indian Council of Agricultural Research, KrishiAnusandhanBhawan, PUSA, New Delhi
- Stamper, A.A., S. H. Sharp and L.B. Donnell, 1986, Evaluating Apparel Quality, Fairchild Publications, America

Liechty, E.G., Potterberg, D.N., Rasband, J.A., 2010, Fitting and Pattern Alteration : A Multimethod Approach, Fairchild Publications, New York.

HSC-HE-6036: CHILDHOOD DISABILITY AND SOCIAL ACTION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Understanding Disability and Inclusion 20

- Defining and understanding disability
- Rights of persons with disability and UNCRPD
- Perspective on disability: Individual and social
- Attitudes towards disability- family, school, society and media

Unit II: Types of Disability 30

- Identification, assessment and etiology with reference to:
- I. Physical disabilities
- II. Intellectual disability
- III. Sensory disabilities- Visual and auditory
- IV. Learning disability
- V. Autism

Unit III: Disability and society 10

- Prevention, therapy, education and management
- Policy and laws

PRACTICAL

- 1. Visits- Government and Private Institutions and Organisations (CGC, schools, NGO's, Hospitals)
- 2. Observe the context
- 3. Program planning
- 4. Media Exploring sources of information about children and their families using print and audio visual media.
- 5. Select Psychometric tests (Raven's Progressive Matrices, Test for Learning disability)

RECOMMENDED READINGS

- Chopra,G., (2012). Early Detection of Disabilities and persons with disabilities in the community. New Delhi: Engage publications
- Chopra,G., (2012). Stimulating Development of Young Children with Disabilities at Anganwadi and at Home: A Practical Guide. New Delhi: Engage publications.
- Sharma, N. (Ed)(2010). The Socail Ecology of Disability-Technical Series -3Lady Irwin College. Delhi:Academic Excellence
- Mangal, S. K. (2007). Exceptional children: An introduction to special education. New Delhi: Prentice Hall of India
- Jangira, N.K.(1997) "Special Educational Needs of Children and Young Adults: An Unfinished Agenda," *Education and Children with Special Needs: From Segregation toInclusion*, Ed. Seamus Hegarty, Mithu Alur, Thousand Oaks: Sage Publications Inc.
- Karna, G. N. (1999). *United Nations and rights of disabled persons: A study in Indian perspective*. New Delhi: A.P.H. Publishing Corporation.
- Mani, R. (1988). *Physically handicapped in India*. Delhi: Ashish Publishing House.
- Mastropieri, M. A., & Scruggs, T. E. (2004). *The inclusive classroom: Strategies for effective instruction*. NY: Pearson.

HSC-HE-6046: INTERIOR DESIGN AND DECORATION (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Design Fundamentals

- Objectives of Art & Interior Design.
- Types of Design: Structural & Decorative.
- Elements of Content: Space, Point, Line, Shape, Form, Texture, Light & Color.

- Elements of Order: Scale, Similarity, Proximity, Sequence, Trends, Themes, Geometrical Organization.
- Principles of Composition Rhythm, Balance, Proportion, Emphasis, Unity, (Variety, Simplicity/Economy, Suitability).
- Composition of a Drawing Harmony, Clarity, Adequacy.
- Color & its Application.
- Dimensions of color.
- Importance of color & its role in creation of the design.
- Color systems.
- Color Harmonies.
- Principles of Design as applied to color use.
- Color Forecasting
- Design Drawing Drawing as a language to explore & communicate Ideas.

Unit II: Furniture & Furnishings: Historical Perspectives & Contemporary Trends 30

- Architectural Styles –based on themes and main periods, like mughul architecture, colonial style, renaissance, post Renaissance and modern style.
- Contemporary Trends in Interior Design with respect to furniture, furnishings & accessories.
- Furniture Types, Construction, Selection and purchase, Arrangement, Care and maintenance
- Furnishings selection, care and maintenance of fabrics used for -
- Soft furnishings: curtains and draperies, upholstered furniture, cushions and pillows, etc.
- Floor coverings
- Accessories Uses, Classification, Design, Selection & Arrangement.
- Traditional and Modern Surface Finishes types and uses
- Furniture
- Wall
- Floor
- Ceilings
- Roofing
- Lighting applications (Energy efficient lighting design number and type of lamps and luminaires for efficiency in lighting).
- Accessories Uses, Classification, Design, Selection & Arrangement.

PRACTICAL

• Drawing – Introduction to drawing instruments & tools (manual)

- Drawing lines (freehand & with drawing instruments) both 2-dimensional & 3-dimensional
- Lettering
- Sketching (figures, buildings, trees & plants, vehicles) both 2-dimensional & 3-dimensional
- Preparation of catalogue comprising pictures denoting application of Art & Elements of Design; Colour Colour Wheel, Dimension & Harmonies of Colour.

 Floor plans 	s (Theme ba	ısed- Manual]
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3

• Elevation & perspective plans (Manual)

2

• Furniture & furnishing plans of specific areas- Critical Analysis

2

- Preparation of portfolio based on historical designs & market review of
- furniture and furnishing materials (upholstery, curtains and draperies, bed & table linen)
- Wall coverings & decorations (pictures, etc)
- Floor coverings & decorations
- Window & door treatments
- Lighting systems
- Artifacts (sculptures, ceramics/terracotta, handicrafts, flower arrangements, etc.)
- Fittings and fixtures
- Wood and its substitutes.

RECOMMENDED READINGS

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.

HSC-HE-6056: ENTREPRENEURSHIP DEVELOPMENT AND ENTERPRISE MANAGEMENT (CREDITS: THEORY-4, PRACTICAL-2) THEORY LECTURES: 60

Unit I: Entrepreneurship Development

18

- Entrepreneurship concept, definition and need for entrepreneurship development, scope of entrepreneurship development in India.
- Entrepreneur characteristics, types, gender issues, role demands and challenges.
- Process of entrepreneurship development, factors affecting entrepreneurial growth.
- Entrepreneurial Motivation major motives influencing an entrepreneur, achievement motivation training, stress management.
- Entrepreneurship Development Programmes need & objectives
- Challenges faced by Women Entrepreneurs

Unit II: Enterprise Planning and Launching

20

- Types of enterprises classifications based on i) capital ii) product iii) location, iv)ownership pattern/structure and v) process.
- Project Formulation steps involved in setting up a business, identifying business opportunities, assessing market potential, market survey & research
- Techno Economic Feasibility Assessment, Project Appraisal

Unit III: Enterprise Management and Networking

- Managing Production
 - Organizing Production; input-output cycle
 - Ensuring Quality
- Managing Marketing

- Understanding markets and marketing
- Functions of Marketing
- 4Ps of Marketing (same as marketing mix)
- Financial Management
 - Meaning of Finance
 - Types and Sources of Finance
 - Estimation of project cost
 - Profit Assessment
- Networking of Enterprises

PRACTICAL

- 1. SWOT analysis with respect to entrepreneurial competencies through case profiling of successful entrepreneurs and enterprises. 2
- 2. Achievement Motivation lab development of entrepreneurial competencies 3
- 3. Survey of an institution facilitating entrepreneurship development in India. 3
- **4.** Preparation of business plan. **6**

- Gundry Lisa K. & Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
- Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company.

SKILL ENHANCEMENT COURSES

HSC-SE-3014: EARLY CHILDHOOD CARE AND DEVELOPMENT (CREDITS: THEORY 1 PRACTICAL 3) PRACTICAL

I: Core concepts in ECCE

- Significance of development in the early years
- Core concepts in ECCE
- Care and education as crucial needs between birth and six years
- International and national ECCE programmes

II Contexts of Care and Development

- Concept of care and development
- Value of family and need for extra familial programmes
- Value of play, responsive environments and learning
- Curriculum, pedagogy, culture and inclusion

Practical

Visit to Early ECCE Centre: crèche/ preschool

Workshops to understand children and document methods of playful interactions to foster development in all domains through sessions on

- Understanding childhood competencies
- Developing teaching learning materials
- Enhancing social and language skills
- Music, movement and drama for children

Identifying ways to assess and record progress of children

Methods and tools to evaluate ECCE programmes

Develop a prototype format for setting up an ECCE Centre

RECOMMENDED READINGS:

- Aggarwal, J. C. (2007). Early Childhood Care and Education: Principles and Practices. Shipra: New Delhi.
- Arni, K. and Wolf G. (1999). Child Art with Everyday Materials. TARA Publishing.
- Mohanty, J. Mohanty, B. (1996). Early childhood care and Education. Deep and Deep Publication, New Delhi.
- Morrison, G. S. (2003). Fundamentals of early childhood education. Merrill/Prentice Hall: Virginia
- Singh, A. (1995). Playing to Learn: A training manual for Early Childhood Education. M.
- S. Swaminathan Research Foundation.
- Swaminathan, M. (1998). *The First five Years*. Sage Publications.

HSC-SE-3024: SURFACE ORNAMENTATION (CREDITS : PRACTICAL 4) PRACTICAL

- 1. Fabric manipulation –cuts, removal of threads 2
- 2. Surface Decoration Embroidery, Ari work, Embellishments 2
- 3. Design through color application 2
- Painting
- Dyeing- Tie and dye, Batik
- Printing- Discharge, Resist, Block, Screen, Stencil
- 4. Thread structure- macramé, braiding, lace making (crochet, tatting) 2
- 5. Surface layering 2
- Applique- simple, cut, felt
- Quilting- hand and machine
- Pleats
- Tucks
- ${\bf 6.\ Product\ development\ using\ the\ above\ design\ exploration\ techniques\ 4}$

RECOMMENDED READINGS:

- 1. Juracek, A. Judy, 2000, Soft Surface, Thames & Hudson Ltd.
- 2. Milne D'Arcy Jean, 2006, Fabric Left Overs, Octopus Publishing Group Ltd.
- **3.** Singer Margo, 2007, Textile Surface Decoration-Silk & Velvet, A&C Black Ltd.

HSC-SE-3034: MATERNAL AND CHILD NUTRITION (CREDITS: THEORY 4) THEORY LECTURES:30

Unit I

- Nutritional needs during pregnancy, common disorders of pregnancy (Anaemia, HIV infection, Pregnancy induced hypertension), relationship between maternal diet and birth outcome.
- Maternal health and nutritional status, maternal mortality and issues relating to maternal health.

Unit II

• Nutritional needs of nursing mothers and infants, determinants of birth weight and consequences of low birth weight, Breastfeeding biology, Breastfeeding support and counselling

Unit III 8

- Infant and young child feeding and care Current feeding practices and nutritional concerns, guidelines for infant and young child feeding, Breast feeding, weaning and complementary feeding.
- Assessment and management of moderate and severe malnutrition among children, Micronutrient malnutrition among preschool children
- Child health and morbidity, neonatal, infant and child mortality, IMR and U5MR; link between mortality and malnutrition;

Unit IV 5

Overview of maternal and child nutrition policies and programmes.

RECOMMENDED READINGS

- Wadhwa A and Sharma S (2003). Nutrition in the Community-A Textbook. Elite Publishing House Pvt. Ltd. New Delhi.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s Banarasidas Bhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.
- National Guidelines on Infant and Young Child Feeding (2006). Ministry of Women and Child Development, Government of India.

HSC-SE-4014: INFORMATION, EDUCATION AND COMMUNICATION MATERIALS FOR DEVELOPMENT (CREDITS: PRACTICAL 4) PRACTICAL

1. Concept of IEC Material

- Meaning of IEC Material
- Importance and scope of IEC material for development.
- Different types of IEC materials for development.
- Role of IEC material for development.

2. Guidelines for Development of IEC Materials

- Selection of IEC material
 - Strength and Limitations of various IEC materials
 - Criteria for selecting IEC material
 - IEC materials for combining for greater impact
- Developing a creative brief
 - Importance of creative brief.
 - Elements of creative brief
- Preparing prototype IEC material
 - Guidelines for developing new IEC material
 - Oualities of effective IEC material
- Pretesting the prototype of IEC material
 - Assessing the pretested results and revising IEC materials
 - Monitoring the use and impact of IEC materials.

3. Various Types of IEC Materials for Development

- Graphics and audio visual charts, posters, flashcards, flexes, flip books, pamphlets, leaflets, brochures, booklets, modules, manuals
- Mass Media: IEC materials for radio, television, newspapers and magazines
 - Radio scripts writing
 - T.V. Programme scripts writing
 - News paper, magazine article writing

Learning Activities

1. Content analysis of various IEC material for development messages

- 2. Designing layouts for various IEC materials
- 3. Writing scripts on selected developmental issues for radio, and T.V programmes.
- 4. Viewing and recording various types of television and radio programmes
- 5. Preparation of various graphic (IEC) materials
- 6. Identifying various IEC materials used by NGO's and GO's for development work.

• Enderson (1972): Introduction to communication theories and practices, Cummings publishing

house, California

- Bernice Hurst (1996): The handbook of communication skills, Kogan Page Limited, London.
- Chandra A, Shah A, Joshi U (1989) : Fundamentals of teaching home science, Sterling publishers, New Delhi
- Wittich and Schuller (1967): Audio visual materials, Havper & Row publications, London
- Keval Kumar (2010): Mass communication in India, Jaico publishing house, AhmedabadSEC

HSC-SE-4024: BAKERY SCIENCE (CREDITS: PRACTICALS-4)

- 1. Basic Concepts of Bakery
- a) Ingredients & processes used for preparation of
- Sponge cake and different types of cake
- Bread and buns
- Cookies and biscuits

Pies

Icing

- b) Product characteristics, common bakery faults and corrective measures
- c) Bakery equipment- Types, selection, operations and maintenance
- 2. Practical Training in Baking of
- Cream cake
- Sponge cake preparations
- Breads, buns,
- Biscuits and cookies

Pies

Icing

RECOMMENDED READINGS

- Dubey, S.C. (2007). Basic Baking 5th Ed. Chanakya Mudrak Pvt.td. Raina et.al. (2010). Basic Food Preparation-A Complete Manual. 4rd Ed. Orient Black Swan Ltd.
- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of
 - Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.

HSC-SE-4034: PATTERN MAKING AND DRAPING CREDITS: 4 (THEORY 1, PRACTICAL 3) THEORY LECTURE: 15

5

• Tools, terms and techniques	
• Fabric terms	
• Dart and Grain line	
UnitII:	5
Basic Upper and lower sloper	
 Principles in pattern making for 	
- Upper garment	
- Lower garment	
- Sleeves	
- Collars	
- Dresses	
Unit III:	5
Introduction to Draping	
• Basic Preparation	

PRACTICAL

UnitI:

Introduction to Pattern Making

- 1. Development of the Bodice Block and its variations through pattern making 15
 - Dart manipulation

• Pattern Making Principles

- Contouring
- Fullness

Principles Skirts, Sleeves and Collars (two each)

- Equipment, dress form and preparation of muslin 69

• Basic Patterns – Basic Bodice, Basic Skirt

2. Development of basic patterns (Bodice & Skirt) Block through draping 6 Adaptation and Construction of any one design by draping

RECOMMENDED READINGS

- •Kiisel K. (2013), Draping: The Complete Course, Laurence King Publishing.
- Armstrong, H.J. (2009), Pattern Making for Fashion Design, Harper Collins Publishers, INC, New York.

HSC-SE-5014: UNDERSTANDING PSYCHOLOGY (CREDITS: THEORY-4)

Unit I: Introduction

- Concept and definition of psychology: Perspectives on behavior.
- Major subfields of psychology; Psychology in modern India;
- Biological basis of human behavior.

Unit II: Perception:

- Perceptual processing, Role of attention in perception, Perceptual organization.
- Perception of depth, distance and movement; Illusions.

Unit III: Learning:

• Classical conditioning, operant conditioning, observational learning; Learning strategies; Learning in a digital world

Unit IV: Memory:

- Models of memory: Levels of
- processing, Parallel Distributed Processing model,
- Information processing, Reconstructive nature of memory; Forgetting, Improving memory

RECOMMENDED READINGS:

- Baron, R. & Misra. G. (2013). Psychology. Pearson.
- Ciccarelli, S. K., & Meyer, G. E. (2010). Psychology: South Asian Edition. New Delhi: Pearson Education
- Passer, M.W. & Smith, R.E. (2010). Psychology: The science of mind and behaviour. New Delhi: TataMcGraw-Hill
- Woolfolk, A., Misra, G., & Jha, A. K. (2012). Fundamentals of Educational Psychology. Pearson

HSC-SE-5024: TEXTILE PROCESSING (CREDIT: 4 (THEORY 1, PRACTICAL 3) THEORY LECTURES: 15

Unit 1:

Dyeing 3

• Classification of dyes

• Principles of colour fastness

Sevak Publications.

Unit 2:	
Printing 12	
• Methods of printing	
- Block printing	
- Flat plate and roller printing	
- Stencil, screen (flat and rotary) printing - Transfer printing -	
Innovative printing methods: Digital printing etc.	
• Styles of printing –	
- direct,	
- discharge,	
- resist,	
• Fixation of prints: Ageing, Steaming, Baking, Wet development	
Washing of printed goods	
PRACTICAL	
1. Dyeing	7
 On cotton using direct, reactive, azo and vat 	
 On wool and silk using acid, basic and reactive 	
• On acrylic using basic dyes	
2. Printing with blocks and screens	5
Direct Printing- Pigment colours	
• Discharge printing- Direct dyes	
• Resist Printing-Azo dyes	
3. Colour fastness of dyed fabrics	8
• Wash fastness	
• Crock/Rub fastness	
• Perspiration fastness	
RECOMMENDED READINGS:	
• Miles L.W.C.(1994), Textile Printing, 2nd edition, England, Society of Dyers and	
Colourists	
•Sekhri S., (2013) Textbook of Fabric Science: Fundamentals to Finishing, PHI Learning Delhi	ing,

•Shenai, V.A. (1987) Chemistry of Dyes and principles of Dyeing ,Vol II, Bombay, India,

HSC-SE-6014: NGO MANAGEMENT & CSR (CREDITS: THEORY 4)

Unit 1: Concept of NGO

- Meaning of NGO and GO
- Difference between Government Organizations and NGO
- Characteristics of good NGO
- Structure of NGO
- Functions of NGO
- Historical Perspective of NGO
- Advantages of NGO
- Present status of NGO
- Contribution of NGO in the Development
- Role of Development Communicator in developing NGO

Unit 2: Starting of NGO

- Steps for starting NGO
- Registration of NGO
- Selection of Personnel
- Training of Personnel
- Proposal writing under NGO
- Identifying Funding agencies
- Resource Mobilization
- Planning, Implementation and Evaluation strategy under NGO
- Documentation
- PR in NGO

Unit 3: NGO Management

- Organizational types and structures
- Managing people and teams in NGOs
- NGO management competencies
- Applying NGO principles and values
- Accountability and impact assessment for NGOs

Unit 4: Problems of NGO

- Training
- Recruitment
- Funding
- Resource Mobilization
- Documentation

Learning Experiences

- 1. Visit of Local NGO
- 2. Studying the Annual report of NGOs
- 3. Studying the ongoing Activities
- 4. Studying the problems

- S. Chandra, Guidelines for NGO Management in India (2003), Published by Kanishka Distributors, New Delhi
- D. Lewis, Management of Non Governmental Development Organization (2001), Second Edition, Published by Routledge, Newyork.
- A. Abraham, Formation and Management of NGOs (2003), Third Edition, Published by Universal Law Publishing Co. Pvt Ltd., New Delhi.
- Sundar, P. 2013, Business and Community: The Story of Corporate Social Responsibility in India, New Delhi, Sage Publication.
- Aggarwal, S.2008, Corporate Social Responsibility in India, Sage publication Pvt. Ltd.

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HSC-SE-6024: COMMERCIAL CLOTHING (CREDIT 4 (THEORY-1, PRACTICAL:3) THEORY LECTURE: 15

Unit I:

Introduction to Commercial Clothing

12

- Principles & Components of Clothing Construction
- Anthropometric measurements and Taking accurate body measurement
- Requirement for good garment construction
- Types of needles and threads
- Sewing problems
- Drafting and its importance
- Principles & Methods of Grading and Sizing

Unit II:

Fashion Promotion by Visual Merchandizing

PRACTICAL

1. Drafting and Construction of:

20

- Kameez
- Salwaar
- Churidar
- Trousers
- Saree blouse

- Armstrong, H.J., 2009, Pattern Making for Fashion Design, Harper Collins Publishers Inc., Ney York.
- Stamper, A.A., S. H. Sharp and L.B. Donnell, 1986, Evaluating Apparel Quality, Fairchild Publications, America
- Burns leslie , Nancy B. 1997, The Business of Fashion- Designing Manufacturing and Marketing, Fairchild publications. USA.

GENERIC ELECTIVE

HSC-HG-1016 : CHILD RIGHTS AND SOCIAL ACTION (CREDITS: THEORY 5, TUTORIAL 1) THEORY LECTURES: 75

Unit I: Introduction to Child Rights 25

- Definitions of child and child rights
- Key philosophical concepts in the discourse on child rights
- Factors of exclusion-socio-economic, disability, geo-political etc.
- Role of family, community & child herself in protecting rights

Unit II: Vulnerable Groups: Causes and Consequences 25

- Street and working, destitute, homeless, institutionalized children
- Living with: chronic illness, HIV/AIDS, disabilities
- Affected by war, conflict, riots, disasters
- Victims of child-trafficking, abuse, dysfunctional families
- Children in conflict with law

Unit III: Framework for Social Action 25

- Role of state in protection of child rights
- · Laws for children- Indian & international
- Constitutional provisions in India
- National policies and programs
- Institutional & non-institutional services

RECOMMENDED READINGS

- Bajpai, A.(2006). Child rights in India: Law, policy and practice. New Delhi: Oxford University Press.
- Bhargava, V. (2005). Adoption in India: Policies and experiences. New Delhi: Sage.
- Virani,). (2000). Bitter chocolate: Child Sexual abuse in India. New Delhi: Penguin
- Weiner, M., Burra, N., Bajpai, A. (2007). Born unfree: Child labour, Education, and the state in India. New Delhi: Oxford University Press.

HSC-HG-2026 : MEDIA, CULTURE AND SOCIETY (CREDITS: THEORY - 5, TUTORIAL - 1) THEORY LECTURES: 75

Unit I: Understanding Mass Media 25

- Characteristics of mass media
- · Function of mass media.
- Uses and effects of mass media on individual, society and culture.
- Power of mass media.
- Role of Mass Media in society.

Unit II: Media Audience analysis 25

- Media Audience analysis (mass, segmentation, product etc, social uses).
- Types of Audience
- Theories of Audience

- Approaches to media analysis
- Media and realism (class, gender, race, age, minorities, children etc.)

Unit III: Media and Popular culture 25

- Relation between Media and Popular culture
- · Social Construction of Reality by media
- Construction vs Distortion of reality
- Cultural Studies approach to media
- Intercultural influences on media

TUTORIAL

- Media Criticism Choose a movie or television series and apply some of the concepts and techniques about interpretation, ideology, or gender/class/race.
- Audience perceptions about media; audience preferences listenership/ viewership
- Media and Governance understand the relationship between media and governance.

RECOMMENED READINGS:

- Potter, James W (1998) Media Literacy. Sage Publications
- Grossberg, Lawrence et al (1998) Media-Making: Mass Media in a popular culture. Sage Publications
- Berger, Asa Authur (1998). Media Analysis Technique. Sage Publications
- Stevenson, N (2002). Understanding Media Studies: Social Theory And Mass Communication, 2nd edition, Sage publications
- Mc Quail, Denis. (2000). Mass Communication Theory.London, Thousand Oaks, New Delhi: Sage Publications.

HSC-HG-2016 : HUMAN NUTRITION (CREDITS : THEORY 4, PRACTICAL 2) THEORY LECTURES: 60

Unit I: Basic Concepts in Nutrition 10

- Basic terms used in nutrition
- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social
- Basic food groups and concept of balanced diet

Unit II: Nutrients 25

Energy- Functions, sources and concept of energy balance.

Functions, Recommended Dietary Allowances, dietary sources, effects of deficiency and/or excess consumption on health of the following nutrients:

- Carbohydrates and dietary fibre,
- Lipids
- Proteins
- Fat soluble vitamins-A, D,E and K
- Water soluble vitamins Thiamin, Riboflavin, Niacin, Pyridoxine, Folate,

Vitamin B₁₂ and Vitamin C

• Minerals - Calcium, Iron, Zinc and Iodine

Unit III: Nutrition during Lifecycle

Physiological considerations and nutritional concerns for the following life stages:

- Adult man / woman
- Preschool children
- Adolescent children
- Pregnant woman
- lactating woman Geriartric Athlete

PRACTICAL

1. Identifying Rich Sources of Nutrients

- Energy , Protein, Iron, Calcium, Fiber, Vitamin A, Ascorbic acid
- 2. Introduction to Meal Planning

Basic food groups

- Use of food exchange list for planning nutritious diets /Snacks for
- Adult man / woman of different activity levels
- Pre school children
- Adolescent children
- Pregnant woman
- Nursing woman

RECOMMENDED READINGS

- Wardlaw and Insel MG, Insel PM (2004). Perspectives in Nutrition. Sixth Edition, McGraw Hill.
- Srilakshmi B (2012). *Nutrition Science*. 4th Revised Edition, New Age Interntional Publishers.
- Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S (2013). Textbook of Nutrition and Dietetics. Phoenix Publishing House Pvt. Ltd.
- ICMR(2010) Recommended Dietary Allowances for Indians. Published by National Institute of Nutrition, Hyderabad.
- Chadha R and Mathur P eds. (2015). Nutrition : A Lifecycle Approach. Orient Blackswan, New Delhi.
- Seth V and Singh K (2006). *Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual.* Elite Publishing House Pvt. Ltd. New Delhi.
- Gopalan C, Rama Sastri BV, Balasubramanian SC (1989) *Nutritive Value of Indian Foods*. National Institute of Nutrition, ICMR, Hyderabad.

HSC-HG-2026 : APPRECIATION OF TEXTILE CRAFTS (CREDITS: THEORY 4, PRACTICAL 2)
THEORY LECTURES: 60

Unit I: Introduction to Crafts

8

 Craftsperson- role and responsibilities Philosophy and aesthetics – indigenous and contemporary textile crafts 	
Unit II: Textile Crafts	
 Types – traditional and modern Materials – fiber, yarn, fabric and products Traditional techniques 	5
 (a) Traditional needle craft techniques Kashida, Kasuti, Kantha, Chikankari, Cutch work, Phulkari 	10
 (b) Dyed, Painted and Printed Textiles Kalamkari, Bandhani, Ikats, Patola, Pochampally Pichwais, Ajrakh, 	12
(c) Woven Saris of India Brocades, Jamdani, Baluchar, Paithani, Chanderi, Kanjeevarams, & Silk of North Eastern India (Muga, Eri, Mulberry/ pat,)	15
(d) Shawls and Carpets of various centres7	
Unit III: Cultural and Economic Empowerment through Crafts	3
Textiles crafts in national economy	
PRACTICALS	
 1. Bandhej&Laharia 5 Demonstration of techniques Handouts and related videos Development of Home textile products 	
2. Embroidery	8

• Crafts- meaning and classification

- Demonstration of traditional hand stitches
 - Kashida,
 - Kasuti,
 - Kantha,
 - Chikankari,
 - Cutch work.
- Interaction with artisan
- Development of bags/pouches yokes/borders for a desired product

3. Printing 6

- Demonstration of a block printing/resist printing
- Visit to craft centre/museum
- Development of stole/dupatta

RECOMMENDED READINGS

- Chattopadhaya, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi
- Das, Shukla, 1992, Fabric Art- Heritage of India, Abhinav Publications, N
 Delhi
- Mazumdar, L., 2013, Textile Tradition of Assam- an empirical study, Bhabani Offset Pvt. Ltd, Guwahati.

HSC-HG-3016 : ADOLESCENT RELATIONSHIPS (CREDITS: THEORY 4, PRACTICAL 2)
THEORY LECTURES: 60

Unit I: Understanding adolescence

20

- Definitions, social construction of adolescence
- Significant physical, physiological & hormonal changes in puberty
- Ecological and cultural influences on adolescence
- Processes in identity formation: social identities, gender & well being

Unit II: Adolescent Relationships: Role in building social capital 20

- Family relationships: in nuclear, extended & joint families
- Peer relationships: identity formation, knowing one's strengths & weaknesses
- Relationships beyond the family and peers

Unit III: Adolescent Well-being

20

- Indicators of well-being: physical, socio-emotional, spiritual
- Relationships and well-being
- Social ecology and experiences that promote well-being

PRACTICAL

- 1. Class room exercise on peer relationships
- 2. Understanding self as a male/female adolescent: exercise on self-reflection
- 3. Writing a brief biography of relationship with a close friend

- 4. Relations with parents and siblings- separate interviews
- 5. Analysis of different forms of media to understand interpersonal relationships
- 6. Workshops- managing emotions with reference to relationships and to learn crisis management
- 7. Methods of promoting well-being- yoga, self-development resources, counselling

- Erikson, E.H. (1968). Identity, youth and crisis. New York: Norton.
- Manthei, R. (1997). Counselling: The skills of finding solutions to problems. London: Routledge.
- Sharma, N. (2009). Understanding Adolescence, New Delhi: National Book Trust.
- Rice, F. P. (2007). Adolescent: Development, Relationships and Culture.
- Santrock, J. W. (2010). Life Span Development: A Topical Approach, New Delhi: Tata McGraw Hill.

HSC-HG-3026 : CURRENT CONCERNS IN PUBLIC HEALTH NUTRITION (CREDITS : THEORY 5 , TUTORIAL 1) THEORY LECTURES: 75

Unit I: Nutritional problems affecting the community

35

Etiology, prevalence, clinical features and preventive strategies of-

- Undernutrition Protein energy malnutrition: Severe Acute Malnutrition and Moderate Acute Malnutrition, Nutritional Anaemias, Vitamin A Deficiency, Iodine Deficiency Disorders
- Overnutrition obesity, coronary heart disease, diabetes
- Fluorosis

Unit II: Strategies for improving nutrition and health status of the community 10 Appropriate interventions involving different sectors such as Food, Health and Education Unit III: Nutrition Policy and Programmes 20

- National Nutrition Policy
- Integrated Child Development Services (ICDS) Scheme, Mid day Meal Programme (MDMP),National programmes for prevention of Anaemia, Vitamin A deficiency, Iodine Deficiency Disorders

Unit IV: Food and Nutrition Security

10

- Concept, components, determinants and approaches
- Overview of Public Sector programmes for improving food and nutrition security **TUTORIAL**
- 1. Planning and evaluation of low cost nutritious recipes for preschoolers, school age children,

adolescents, pregnant and nursing mothers.

9

- 2. Planning and evaluation of low calorie nutritious recipes for weight management 2
- 3. Planning and conducting a food demonstration.

2

4. Visit to an ongoing nutrition programme.

1

RECOMMENDED READINGS:

• Wadhwa A and Sharma S (2003). Nutrition in the Community-A Textbook. Elite Publishing

House Pvt. Ltd. New Delhi.

- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s BanarasidasBhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.
- Gibney MJ (2005). Public Health Nutrition.
- Vir S. (2011) Public Health Nutrition in developing countries. Vol 1 and 2
- ICMR (1989) Nutritive Value of Indian Foods. National Institute of Nutrition, Indian Council

of Medical Research, Hyderabad.

- ICMR (2011) Dietary Guidelines for Indians A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Park K (2011). Park's Textbook of Preventive and Social Medicine, 21st Edition. M/s BanarasidasBhanot Publishers, Jabalpur, India.
- Bamji MS, Krishnaswamy K and Brahmam GNV (Eds) (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi

HSC-HG-4016 : ENTREPRENEURSHIP AND ENTERPRISE MANAGEMENT (CREDITS : THEORY 4 , PRACTICAL 2) THEORY LECTURES: 60

Unit I: Entrepreneurship Development

16

- Entrepreneurship concept, definition and need for entrepreneurship development, scope of entrepreneurship development in India.
- Entrepreneur characteristics, types, gender issues, role demands and challenges.
- Process of entrepreneurship development, factors affecting entrepreneurial growth.
- Entrepreneurial Motivation major motives influencing an entrepreneur, achievement motivation training, stress management.
- Entrepreneurship Development Programmes need & objectives
- Challenges faced by Women Entrepreneurs

Unit II: Enterprise Planning and Launching

20

- Types of enterprises classifications based on i) capital ii) product iii) location, iv)ownership pattern/structure and v) process.
- Project Formulation steps involved in setting up a business, identifying business opportunities, assessing market potential, market survey & research
- Techno Economic Feasibility Assessment, Project Appraisal

Unit III: Enterprise Management and Networking

24

- Managing Production
 - Organizing Production; input-output cycle
 - Ensuring Quality
- Managing Marketing
 - Understanding markets and marketing
 - Functions of Marketing

- 4Ps of Marketing (same as marketing mix)
- Financial Management
 - Meaning of Finance
 - Types and Sources of Finance
 - Estimation of project cost
 - Profit Assessment
- Networking of Enterprises

PRACTICAL

- 5. SWOT analysis with respect to entrepreneurial competencies through case profiling of successful entrepreneurs and enterprises. 2
- **6.** Achievement Motivation lab development of entrepreneurial competencies **3**
- 7. Survey of an institution facilitating entrepreneurship development in India. 3
- **8.** Preparation of business plan. **6**

RECOMMENDED READINGS

- Gundry Lisa K. & Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
- Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company.

HSC-HG-4026 : INTERIOR DESIGN (CREDITS : THEORY 4 , PRACTICAL 2) THEORY LECTURES: 60

Unit I: Design Fundamentals

30

- Objectives of Art & Interior Design.
- Types of Design: Structural & Decorative.
- Elements of Content: Space, Point, Line, Shape, Form, Texture, Light & Color.
- Elements of Order: Scale, Similarity, Proximity, Sequence, Trends, Themes, Geometrical Organization.
- Principles of Composition Rhythm, Balance, Proportion, Emphasis, Unity, (Variety, Simplicity/Economy, Suitability).
- Composition of a Drawing Harmony, Clarity, Adequacy.
- Colour dimensions, systems and harmonies
- Design Drawing Drawing as a language to explore & communicate Ideas.

Unit II: Furniture & Furnishings: Historical Perspectives & Contemporary Trends 30

- Architectural Styles –based on themes and main periods like post Renaissance and modern style.
- Contemporary Trends in Interior Design with respect to furniture, furnishings & accessories.
- Furniture Types, Construction, Selection and purchase, Arrangement, Care and maintenance
- Furnishings selection, care and maintenance of fabrics used for -
- o Soft furnishings: curtains and draperies, upholstered furniture, cushions and

pillows, etc.

- Floor coverings
- Accessories Uses, Classification, Design, Selection & Arrangement.
- Traditional and Modern Surface Finishes types and uses
- Furniture
- o Wall
- o Floor
- Ceilings
- o Roofing
- Lighting applications (Energy efficient lighting design number and type of lamps and luminaires for efficiency in lighting).
- Accessories Uses, Classification, Design, Selection & Arrangement.

PRACTICAL

• Drawing 2

Introduction to drawing instruments & tools (manual)

- Drawing lines (freehand & with drawing instruments) both 2-dimensional & 3-dimensional.
- Lettering.
- Sketching (figures, buildings, trees & plants, vehicles) both 2-dimensional & 3-dimensional.
- Preparation of catalogue comprising pictures denoting application of Art & Elements of Design; Color- Color Wheel, Dimension & Harmonies of Color.
- Floor plans (Theme based- Manual)

3

• Elevation & perspective plans (Manual)

3

 \bullet Furniture & furnishing plans of specific areas- Critical Analysis

2

Preparation of portfolio on any one of the following

2

- Wall coverings & decorations (pictures, etc)
- Floor coverings & decorations.
- Window & door treatments.
- Lighting systems.
- Artifacts (sculptures, ceramics/terracotta, handicrafts, flower arrangements, etc.)
- Fittings and fixtures.
- Wood and its substitutes.

RECOMMENDED READINGS

- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley & Bayen., (2003), The Elements of Design, Mitchell Beazley.